IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: David Lawrence

Application Serial No.: 09/772,427

Filing Date: January 30, 2001

For: AUTOMATED POLITICAL RISK MANAGEMENT

Group Art Unit: 3628

Examiner: Richard C. Fults

DECLARATION UNDER RULE 132

Attorney Docket No.: G08.081

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

I, Jeffrey Starr, make this declaration of my own hand and on personal knowledge, and state under penalty of perjury, as follows:

Background

1. I am an official of the United States Department of Defense on sabbatical to Goldman, Sachs & Co. ("Goldman Sachs") under an Office of Personnel Management program (Section 3396 of Chapter 33, Part III, Title 5, United States Code) and pursuant to the terms of a December 2003 Memorandum of Agreement between the United States Department of Defense and Goldman, Sachs & Co. While at Goldman Sachs, I have been assigned to the Business Intelligence Group for most of my work responsibilities, as well as to the Sovereign Risk Management and Advisory Group for other responsibilities. Among my assignments in the Business Intelligence Group is the responsibility of assisting and advising the Regulatory Data Corporation ("RDC"), a licensee of the above identified application. It is in this context that I have been asked to provide my view as someone skilled in the art of analysis pertaining to security risks. While I am generally computer savvy, I am not a computer programmer.

2. I am a career civil servant in the Senior Executive Service of the United States Government. I joined the Federal Government in 1986 and have served in a number of capacities in the United States Department of State and the Department of Defense. I am currently assigned to the Office of Special Operations and Low Intensity Conflict in the Department of Defense, where I have been since November 2001. Prior positions in the

Government have included Deputy Assistant Secretary of Defense for Russia, Ukraine and Eurasia (1998-2001), Acting Principal Deputy Assistant Secretary of Defense for International Security Policy (1996-1998), and Principal Director for Threat Reduction Policy (1994-1996). In these capacities and other prior assignments, I have developed expertise in a broad range of national security matters ranging from international negotiations, to weapons of mass destruction, to regional security, counterproliferation, counterinsurgency and counterterrorism activities, and other areas related to foreign organized crime and intelligence matters. Through such assignments, I have developed significant experience in different approaches to analyzing, anticipating and countering a broad range of security threats. Academically, I have a B.S. degree in mathematics from the University of Illinois and a Ph.D. in international relations from the Massachusetts Institute of Technology, and am an adjunct professor at Georgetown University in Washington D.C. I believe I am (and was as of the filing date of the Application) skilled in the fields of mathematics and security and risk analysis. I believe I am able to recognize and provide an opinion of the abilities of a person of ordinary skill in the fields of mathematics and security and risk analysis as of the time of the filing of the Application.

Scope of Review

3. In forming my opinions set forth in this declaration, I have reviewed the following:

(a) U.S. Patent Application Serial No. 09/772,427, entitled "Automated Political risk Management System," filed on 30 January 2001 by David Lawrence (the "Application"), and

(b) Office Action mailed 24 February 2004 from Examiner Fults (the "Office Action")

4. I have also relied on my personal expertise and professional knowledge and experience.

Opinions

5. I find that the Application sets forth a sufficiently clear and concise description of a system that has utility for evaluating risks in a standardized manner, in this case risks associated with politically identified people proposing financial transactions which could entail financial, legal, regulatory and/or reputational risks for financial institutions or other agencies. At the core of this system is a methodology for evaluating such risks in a standardized manner, necessary to facilitate communication within any industry about the scale of risks faced in such situations as mentioned above. The compelling need to be able to evaluate risks in such a manner seems to me to be driven both by market factors and changes in the global financial and political-security situations. Whereas the financial industry market formerly focused on credit risk, as well as regulatory risk, in the conduct of its transactions, threats of money laundering and association with individuals who may have achieved wealth through illegal or illicit means, such as narcotics trafficking or corruption in foreign states, have increased over time. Compounding this

trend are changes in the international situation marked by market globalization, dissolution and transformation of political systems, terrorism, etc. Therefore, the methodology described and claimed in the Application is one which is useful and which can provide greater objectivity and standardization in evaluating such risks.

6. It is my view that someone skilled in the art of risk analysis at the time of filing the Application would be able to utilize the methodology provided in the Application and that the Application sets forth a methodology that is understandable to a person of ordinary skill in the art of assessing the nature and relative magnitude of the risks, calculated in a manner that permits and facilitates communication of such risk calculations to others engaged in similar activity.

7. I understand that the purpose of the Application is to describe an automated political risk management system made up of a number of components: accumulated risk relevant information stored in a database, the ability to retrieve information in an automated manner, a rating system relating risk relevant criteria to algorithms for the purpose of deriving a risk quotient or other rating value, whose ultimate purpose is to give the user a standardized measure of the risk associated with engaging in activity with particular politically identified persons.

8. I understand the nature of the information that would constitute the database as being related to individuals or entities (politically identified persons) with whom doing business (financial or otherwise) could entail risks for a user of the Application. Such a database could be populated with any risk relevant publicly available information (or other risk relevant information depending on the user's needs). A rating system would identify criteria for ascertaining what bits of information are risk-relevant for the intended purpose of the risk management system. A system for financial institutions, for example, would identify criteria (risk factors), such as prior involvement with illicit activity, nationality (if individuals from certain nations are judged more likely to be higher risk for business purposes, etc.), and other factors. These criteria then would be weighted (using a numeric coefficient between 0 and 1) depending on expert-level assessments of their overall contribution to assessing risk relevance. For example, a criterion related to prior involvement in illicit financial activity could be more heavily weighed than nationality as being an indicator of future risk. From scoring of criteria and weighting them, an algorithm would be used to generate a "risk quotient" which I understand to be a numeric value that measures the risk normalized to a no-risk value. In this sense, the absolute numeric value assigned to a risk factor is irrelevant, since all risk weightings are normalized to a no-risk value. For example, a financial institution might conclude in the current world situation that dealing with a Canadian investor is risk free, at least insofar as nationality is concerned, whereas dealing with a Middle Eastern investor carries greater risk. In such a case, the algorithm might assign a value of zero or one to a Canadian nationality, while it scores a Middle Eastern nationality at 10 (it could be any number greater than the 0 or 1). If all other nationalities are scored with values reflecting expert opinion about the risk of dealing with individuals of said nationality, then a relative score is established essentially ranking the nationality criterion in accordance with expert views of the associated risks.

9. An exemplary algorithm could be:

$$aX + bY + \ldots + cZ = R$$

where a, b, ..., c are the relative weight factors (ranging from 0 to 1),

and X, Y, ..., Z are numerical scores assigned to variables associated with criteria (e.g., if a criterion is nationality, a variable could be Canada or Russia),

and R is the risk quotient.

10. The sophistication of the automated risk management system described by the Application need not imply a sophisticated algorithm, as seen by the linear equation in paragraph 10. Indeed, this is the method of calculation described in paragraph [0049] of the Application: "A risk quotient can be calculated by multiplying a weighted numerical value of the specific information times the category weighting." From my perspective, the uniqueness of the system pertains more to the development of the criteria and weighting schemes and by the database that supports calculation of the risk quotient.

11. I find the terms used in the Application to be clear and understandable, and therefore understand how the methodology presented in the Application addresses the objectives of the Application as put forth in paragraph [0007] and as recited in the claims.

12. The examiner has voiced concern about the use of the word "quotient" in describing the calculated result of the Application methodology. It is correct that in normal mathematical meaning, quotient involves the division of two values. However, the meaning derived from such a mathematical operation relates to the normalization of risk valuations to non-risk valuations (hence the notion of a comparison, relative score or, equivalently, a ratio, keeping in mind also that division is a form of multiplication). Moreover, I understand the use of the word quotient to refer to a calculated result that does not necessarily carry any implication of a specific mathematical operation, much like the contemporary use of the term "intelligence quotient" does not directly imply a division operation.

13. The examiner has voiced concern about the absence of a definition for a specific threshold to distinguish no risk and risk outcomes, the absence of a list of evaluation factors, and the absence of a specific equation. I believe that the Application intends to present a methodology for specifying a risk management system, whose specific applications may change depending on the nature of the user's interests and business. A set of relevant risk factors to an investment banker or hedge fund manager might not be the same as those for an insurance company or a government, for example. In such cases, it would be advisable to adjust the specific criteria, risk scores and weightings to the needs of the user. Moreover, even for a single user, weighting factors or risk factor scores might change over time. For example, 20 years ago, a Saudi investor might have posed a different, indeed lower, risk than a Saudi investor could today. Certain charities

would fall into a similar general characterization. So, it seems clear there can be no absolute numeric valuations, and there need be no absolute thresholds, for the methodology to provide value to users. Finally, although no equations are presented in the Application in traditional form, the equation illustrated in paragraph 10 above is described in prose in the Application. But one unique contribution of the Application is the specification of an entire interrelated system for managing risk in an automated manner, not in asserting the accuracy of one equation form over another.

14. The examiner has voiced concern that users would have to conduct an undue amount of experimentation to use the invention. I believe that it is not so much experimentation that would be required of users, but that users would have to adapt the invention to their specific uses by specifying, modifying, or applying criteria relevant to their own industry or interests in the calculation of the risk quotient. This is a process of application, not experimentation. Generally, given the stated objectives of the invention, that is to develop an automated risk management system focused on politically identified persons, the criteria discussed in the Application would be similar across a wide band of users, although additional criteria would have to be specified, and some users may have unique criteria against which they would wish to search the database. It is correct that such specification of criteria includes a subjective interpretation, but that pertains more to the nature of assessing risk based on modeling behavior rather than a flaw in the concept of the invention. Additionally, the "subjective" assessment of what criteria are relevant for a given user would normally be made by experts and other experienced persons in that industry (e.g., financial industry), reflecting professional experience. It is the application of the algorithm to these criteria which provides an objective assessment score (i.e., the risk quotient), which provides persons in an industry responsible for assessing risk with an objective and standardized way to evaluate and communicate with others the magnitude of risk to which they would be exposed in any particular transaction.

Conclusion

15. As someone skilled in the art of identifying and evaluating risk, as well as in the art of mathematics, I find the Application to be sufficiently clear with regard to its terms and process flow to understand its purpose, the logic of the model, the methodology for how an automated system would be constructed and used to generate a risk quotient, and the meaning of the risk quotient itself in practical use to identify potential risk involved in transactions, for example financial transactions. I believe others skilled in these arts would arrive at the same conclusions. In particular, as of the filing date of the Application, I believe a person of ordinary skill in the art of identifying and evaluating risk could use the claimed invention without undue experimentation based on the disclosure.

I further declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18

of the United States Code, and that such willful false statements may jeopardize the validity of the patent application.

12 May 2004
Date

Jeffrey Starr